# 7. ISSUES

These issues were outstanding upon release of this document, Revision 1.0. Disposition of each is recorded below.

(a) *Issue:* How many LRNs will be assigned per MSC?

*Disposition*: Closed. Resolved in § 3.1.2 with additional text.

(b) *Issue:* Are there methods wireless could employ for more efficient routing (e.g., a wireless indicator on the MDN in the NP Database)?

*Disposition*: Closed. It has been agreed that this topic is beyond the scope of this document at this time.

(c) *Issue:* The impact of WNP with regard to Emergency Callback whether the call back is over a roamer access port or otherwise requires further study.

*Disposition*: Closed. Resolved in §3.3 with additional text.

(d) Performance and capacity impacts should be studied.

*Disposition*: Closed. Service providers shall be responsible for working the performance and capacity impacts within their own networks in cooperation with their individual network element vendors.

(e) *Issue:* How will MINs be administered?

*Disposition*: Closed.. MIN Administration Guidelines are currently under development. This document will refer to the guidelines, but guidelines will not be discussed in detail here..

(f) *Issue:* It may be assumed that providing resellers with numbers in and of itself does not make these numbers ported (and thus have LRNs assigned in the NP database). However, what if a reseller wishes to resell off a different facility provider and still retain its numbers? Can a reseller port a block of numbers? What other issues will existing with resellers as a result of LNP? The treatment of resellers, resellers numbers and number portability will be noted on this issue list and addressed at some future date. Divide into two elements -- Retail porting of reseller subscribers; wholesale porting of reseller subscribers

*Disposition*: CLOSED. Resolved in §4 with additional text.

(g) *Issue:* Uniform treatment by wireline providers of calls to wireless subscribers continues to be an issue. Will the rating be based on the original wireline rate center or the fact that the subscriber is being served by a WSP? This refers to the calling party. For example if moving from wireline to wireless, the original wireline number may not

get the same wide-area calling benefits as if the porting sub picks up a new number within the wide area calling number range.

*Disposition*: Closed. Resolved with additional text in §5.17.

(h) *Issue*: Will notification of an NPA-NXX opening for portability in order to provision the MSC be obtained from the LERG? If so, what is the process and system impact? Will this data also be available from the NPAC-SMS, and if so, in an automatic download?

*Disposition:* Closed. Resolved with text in §3.1.2.

(i) *Issue:* A standard solution (for the included alternatives or other) for delivery of a short message to a ported MDN must be chosen.

*Disposition:* Closed. Resolved with text in §3.3.4.

(j) *Issue:* Impacts of WNP on Code Splits must be further studied.

*Disposition:* Closed. Resolved with text in §3.3.7.

(k) *Issue:* The following implementation alternatives have been submitted for contribution in order to aid the complexities of routing a Location Request to the HLR from the gateway MSC:

i) The MSC can translate the called MDN to the address of the called subscriber's HLR.

ii) The SS7 Signaling network can translate the called MDN to the address of the associated subscriber's HLR.

iii) The Originating MSC can query a NP DB to obtain the LRN, and route the signaling message to the HLR associated with the LRN.

*Disposition*: Closed. Resolved with text in §3.1.8.1.

## *Appendix A: Call Processing Matrix*

### 1. Introduction

The following pages contain two matrices that provide background information regarding how call processing is impacted relative to which query is performed first. This information is intended to be supplemental and referential to the text. It should not be construed as implementation requirements.

The two matrices describe switch processing procedures for two cases - either the NP query is performed first or the HLR query is performed first. These are clearly marked at the top of the matrix.

### 2. Background Concepts

When a MSC processes a call, there is always a Called Party Number involved. The NPA-NXX portion of the Called Party Number, ("dialed code") may be classified in various ways. One way is whether the dialed code is open for portability or not. If the dialed code is "portable", then queries to a NP database should be performed, otherwise, there is no need to.

Another way to classify the dialed code is whether the code has been "opened" on the switch or not. Opened is defined as requiring a query to the HLR as a mobile subscriber may be served. . If the code is opened, then it could be "ported in" or "LERG Assigned" to the MSC. The former indicates that the code was opened due to portability, while the later indicates that the code is assigned to the MSC and was opened as part of normal operation. This distinction is critical since it impacts the assumption as to how an absent HLR profile should be treated. If the code is LERG assigned, a vacant HLR profile could be due to the number being unassigned, the subscriber having ported out, or the number being aged. If the code was ported in (i.e. not LERG assigned), then a vacant HLR profile could be that the subscriber has not ported and is served by the original codeholder, the subscriber has ported to another service provider, or the subscriber has ported to the service provider but the number is being aged.

### 3. Reading the Matrix

Each matrix presumes the HLR or NP query is presumed first and describes the processing of the call relative to the database contents. For example, if the HLR query is performed first, then the chart describes processing for each case of whether the HLR contains a record or not. Dependent on what the database contents is, the other query must then be performed.

The center column classifies the status of the called party number's NPA-NXX. There are four combinations possible as denoted by the "Scenario Number" on the left most column (note that the last two rows are the same NPA-NXX status and are both part of Scenario 4). Each scenario is a combination of whether the called NPA-NXX is "portable" and whether the code is "LERG Assigned" *(this presumes the code is already "opened" on the switch)*.

The immediate left and right columns describe the call processing for incoming trunk calls and mobile originated calls respectively. The comments on the left and right apply respectively as well.

For each call processing situation (either mobile originated or incoming trunk), the switch processing depends on the database contents. Depending on the contents, additional queries may be required or normal call processing should occur. In some instances, the action is the same regardless of the database contents

**4. Observations**

Various events are possible but should be weight against their occurrence. For example, "Scenario 4B: Incoming Trunk Call" represents an incoming call from another service provider (usually the ILEC) where no LNP query has been performed. This is essentially default routing to the WSP. It is presumed that the N-1 carrier will perform the query and this scenario will be relatively rare. Consequently, engineering to optimize this situation is of little benefit.

Another situation, "HLR Query Performed First, Scenario 3, Mobile Station Origination" can lead to significant network reliability issues. In this case, the code has been opened on the switch due to a subscriber porting in. It is quite possible that hundreds of new codes will be opened on a switch to accommodate ported subscribers. If the HLR query is performed first, then any mobile originated call to that NPA-NXX would result in a query to the HLR. If only a relatively few subscribers are ported from each NPA-NXX, then the likelihood of finding a HLR record would be very small. However, every call to any number in those NPA-NXX's would result in HLR queries *and could easily cause significant HLR performance impacts.* Consequently, unless otherwise indicated, the MSC should default to performing the NP query first.

*Figure A-1 HLR Query First – WNP Call Processing*

| *Scenario* | *Comments* | *Incoming Trunk Call* | | *Called NPA-NXX Status* | | *Mobile Station Call Origination* | | *Comments* |
|---|---|---|---|---|---|---|---|---|
| | | *HLR Record Present* | *No HLR Record* | *Ported* | *LERG assigned* | *HLR Record Present* | *No HLR Record* | |
| 1 | Misrouting has occurred | If LRN Present, return cause code #26<br><br>If LRN not present, normal error procedures | | No | No<br><br>(Code not resident on switch) | Route out | | No need to do HLR or NP query |
| 2 | No LRN Allowed. Receiving an LRN would be an error. | Route call normally | Vacant Treatment | No | Yes<br><br>(Code is resident on switch, but is not portable) | Route call Normally | Vacant Treatment | No need to perform NP query |
| 3 | LRN must be present and GAP code must match switch code list<br>No LRN is an error. | Route call normally | Vacant Treatment | Yes | No<br><br>(Code is not ported into switch) | Route call Normally | Perform NP Query Results will dictate route call or provide intercept. | Must perform NP query to know how to handle call |
| 4a | Assume LRN Present:<br>Gap must match switch code list | Route call normally | Vacant Treatment | Yes | Yes<br><br>(Resident code opened for portability.) | Route call Normally | Perform NP Query Results will dictate route call or provide intercept. | Must perform NP query to know how to handle call |
| 4b | Assume LRN Not Present. Presumes rapid removal of ported number records from HLR | Route call normally | Perform NP Query Results will dictate route call or provide intercept. | Yes | Yes<br><br>(Resident code opened for portability) | Route call Normally | Perform NP Query Results will dictate route call or provide intercept | Must perform NP query to know how to handle call |

Notes:

"Incoming Trunk Call" means a call being delivered to an MSC over aSS7 trunk

"Mobile station Setup" means a call originated by a mobile subscriber.

NPA Status - these are two flags associated with each NPA-NXX in the MSC translation tables.

"portable" indicates the code is opened for portability and needs to be queried. This flag applies to all NPA-NXX values in the routing table (whether opened on the MSC or not).

This only applies to codes "open" on the switch (i.e., originally assigned or ported into the switch).

The above implies that the MSC differentiates between NPA-NXXs routed out of the MSC to the PSTN and codes which it serves. If the MSC implementation does not differentiate this, then a third flag would have to be defined to differentiate this.

*Figure A-2: NP Query First - WNP Call Processing*

| *Scenario* | *Comments* | *Incoming Trunk Call* | | *Called NPA-NXX Status* | | *Mobile Station Call Origination* | | *Comments* |
|---|---|---|---|---|---|---|---|---|
| | | *LRN exists* | *No LRN* | *Portable* | *LERG assigned* | *LRN exists* | *No LRN* | |
| 1 | If LRN present, return cause code # 26<br>If not LRN present, normal error procedures | Error –cause code # 26 | | No<br>(Code not resident on switch) | No | Route call out of switch | | No need to do HLR or NP query |
| 2 | No LRN Allowed in IAM (LRN would be an error) | No NP Query Required, Process call normally with HLR query | | No<br>(Code resident but not portable) | Yes | Process call Normally. Perform HLR query | | No need for NP query. Do HLR query |
| 3 | LRN must be present and GAP code must match switch code list (no LRN is error) | No NP Query Required. Process call normally with HLR query | | Yes<br>(Code ported into switch) | No | Route call as LRN indicates (Route call to external switch or own switch) | Process call Normally. Initiate HLR query | Perform NP Query |
| 4a | Assume LRN Present in IAM: Gap value must be in switch list of opened codes | Process Call normally with HLR Query | | Yes<br>(Resident code opened for portability) | Yes | Route as LRN indicates<br>(Route call to external switch or own switch) | Process call Normally<br>Initiate HLR query | Perform NP Query (No LRN results in Normal Call processing) |
| 4b | Assume LRN Not Present in IAM | If "own" or no LRN, initiate HLR query<br>If "other" LRN, route call out as appropriate | Process call normally, initiate HLR query | Yes<br>(Resident code opened for portability) | Yes | Route as LRN indicates<br>(Route call to external switch or own switch) | Process call Normally<br>Initiate HLR query | Perform NP Query<br>(No LRN results in Normal Call processing) |

Notes:

"Incoming Trunk Call" means a call being delivered to an MSC over aSS7 trunk

"Mobile station Setup" means a call originated by a mobile subscriber.

NPA Status - these are two flags associated with each NPA-NXX in the MSC translation tables.

"portable" indicates the code is opened for portability and needs to be queried. This flag applies to all NPA-NXX values in the routing table (whether opened on the MSC or not).

"LERG Assigned" means the MSC is the codeholder of the NPA-NXX. This only applies to codes "opened" on the switch (I.e. originally assigned or ported into the switch).

The above implies that the MSC differentiates between NPA-NXXs routed out of the MSC to the PSTN and codes which it serves. If the MSC implementation does not differentiate this, then a third flag would have to be defined to differentiate this.

## *Appendix B: Local Service Request (LSR) Form Usage for Inter-Service Provider Communications*

### 1. Introduction

This appendix contains key information extracted from the workshop report.

### 2. Applicable LSR Forms

The Ordering and Billing Forum (OBF) is an industry forum that developed the LSR forms to provide a guideline for inter-carrier communication. OBF does not demand that all carriers exchange the pieces of information contained in the LSR forms, rather it leaves that negotiation up to the individual carriers involved in the porting process. Thus, each carrier must make individual agreements with other carriers involved in the porting process to define how and what information will be changed.

The following forms apply to the wireless carriers when porting a subscriber.

- *Local Service Request Form* -- Recipient carrier requests porting due date from donor service provider.
- *End User Information Form* -- Recipient carrier provides name/address information for donor service provider to enable cross reference between ported # and name/address.
- *Number Portability Form* -- Recipient carrier provides ported # to donor service provider.
- *Local Service Request Confirmation Form* -- Donor carrier confirms ported # and port due date.

### 3. Fields Used

Within the forms above there are many fields that do not apply to wireless, as the wireless network infrastructure is very different from the wireline side.

The table below contains the four potential LSR forms to be used by wireless carriers for Number Portability, and the corresponding fields on the form. On the right side of the table are two columns, wireless and wireline. The wireline values were taken directly from the OBF Form Preparation Guides. The values in the columns are as follows:

- *Required* (R) is defined as the field must be populated.
- *Optional* (O) is defined as the field may or may not be populated.
- *Prohibited* (P) is defined as the field must not be populated.
- *Conditional* (C) is defined as the field is dependent upon the relationship to another entry as specified in the usage statement and is dependent upon the presence, absence or combination of other data entries.
- *Not Used* (N) is defined as the field must not be populated by wireless carriers.

Further, an additional column has been added to indicate the type of data being provided. There are two types of data, the first type facilitates the process of exchanging or administering the LSR, the second type facilitates the process of porting subscribers (e.g., data used for the purpose of verifying or provisioning a subscriber). The values in the type column are as follows:

- *Porting* (P) is defined as a type of data that facilitates the porting process between carriers.
- *Administrative* (A) is defined as a type of data that facilitates the exchange or administration of the LSR process.

| Field Abb. | Field # | Field Name | Wireless | Type | Wireline |
|---|---|---|---|---|---|
| | | | | | |
| **Local Service Request Form** | | | | | |
| **Administrative Section (Fields 1-49)** | | | | | |
| CCNA | 1 | Customer Carrier Name Abbreviation | R | A | R |
| PON | 2 | Purchase Order Number | R | A | R |
| VER | 3 | Version Identification | O | A | O |
| LSR NO | 4 | Local Service Request Number | N | | C |
| AN | 5 | Account Number | C | A | C |
| ATN | 6 | Account Telephone Number | C | A | C |
| SC | 7 | Service Center | O | A | R |
| PG_of_ | 8 | Page _ of | R | A | R |
| D/TSENT | 9 | Date and Time Sent | R | A | R |
| DDD | 10 | Desired Due Date | R | P | R |
| APPTIME (DDD) | 11 | Appointment Time | N | | O |
| DDDO | 12 | Desired Due Date Out | N | | C |
| APPTIME (DDDO) | 13 | Appointment Time | N | | O |
| DFDT | 14 | Desired Frame Due Time | R | P | C |
| PROJECT | 15 | Project Identification | N | | O |
| CHC | 16 | Coordinated Hot Cut | O | P | O |
| REQTYP | 17 | Requisition Type and Status | R | A | R |
| ACT | 18 | Activity | R | A | R |
| SUP | 19 | Supplement Type | C | A | C |
| EXP | 20 | Expedite | C | A | C |
| AFO | 21 | Additional Forms | C | A | C |
| RTR | 22 | Response Type Requested | R | A | R |
| CC | 23 | Company Code | C | A | C |
| AENG | 24 | Additional Engineering | N | | O |
| ALBR | 25 | Additional Labor | N | | O |
| SCA | 26 | Special Construction Authorization | N | | O |
| AGAUTH | 27 | Agency Authorization Status | C | A | C |
| DATED | 28 | Date of Agency Authorization | C | A | C |
| AUTHNM | 29 | Authorization Name | O | A | O |
| ACTL | 30 | Access Customer Terminal Location | N | | C |
| AI | 31 | Additional Point of Termination Indicator | N | | C |
| APOT | 32 | Additional Point of Termination | N | | C |
| LST | 33 | Local Service Termination | N | | C |
| LSO | 34 | Local Serving Office | N | | C |
| TOS | 35 | Type of Service | N | | C |
| SPEC | 36 | Service and Product Enhancement Code | N | | O |

| Field Abb. | Field # | Field Name | Wireless | Type | Wireline |
|---|---|---|---|---|---|
| NC | 37 | Network Channel Code | N | | O |
| NCI | 38 | Network Channel Interface Code | N | | C |
| CHANNEL | 39 | Channel | N | | C |
| SECNCI | 40 | Secondary Network Channel Interface Code | N | | C |
| RPON | 41 | Related Purchase Order Number | N | | O |
| RORD | 42 | Related Order Number | N | | C |
| LSP AUTH | 45 | Local Service Provider Authorization | N | | O |
| LSP AUTH DATE | 46 | Local Service Provider Authorization Date | N | | C |
| LSP AUTH NAME | 47 | Local Service Provider Authorization Name | N | | C |
| CIC | 48 | Carrier Identification Code | N | | O |
| CUST | 49 | Customer Name | C | A | C |
| | | | | | |
| **Bill Section (Fields 50-68)** | | | | | |
| BI1 | 50 | Billing Account Number Identifier 1 | C | A | C |
| BAN1 | 51 | Billing Account Number 1 | R | A | R |
| BI2 | 52 | Billing Account Number Identifier 2 | C | A | C |
| BAN2 | 53 | Billing Account Number 2 | C | A | C |
| ACNA | 54 | Access Customer Name Abbreviation | N | | R |
| EBD | 55 | Effective Bill Date | N | | O |
| BILLNM | 56 | Billing Name | N | | C |
| SBILLNM | 57 | Secondary Billing Name | N | | O |
| TE | 58 | Tax Exemption | N | | C |
| EBP | 59 | Extended Billing Plan | N | | O |
| STREET (BILLNM) | 60 | Street Address | N | | C |
| FLOOR (BILLNM) | 61 | Floor | N | | O |
| ROOM (BILLNM) | 62 | Room | N | | O |
| CITY (BILLNM) | 63 | City | N | | C |
| STATE (BILLNM) | 64 | State/Province | N | | C |
| ZIP CODE (BILLNM) | 65 | Zip Code | N | | C |
| BILLCON | 66 | Billing Contact | N | | C |
| TEL NO (BILLNM) | 67 | Telephone Number | N | | C |
| VTA | 68 | Variable Term Agreement | N | | O |
| | | | | | |
| **Contact Section (Fields 69-95)** | | | | | |
| INIT | 69 | Initiator Identification | R | A | R |
| TEL NO (INIT) | 70 | Telephone Number | R | A | R |
| EMAIL (INIT) | 71 | Electronic Mail Address | O | A | O |
| FAX NO (INIT) | 72 | Facsimile Number | O | A | O |
| STREET (INIT) | 73 | Street Address | R | A | R |
| FLOOR (INIT) | 74 | Floor | O | A | O |
| ROOM/MAIL STOP | 75 | Room/Mail Stop | O | A | O |

| Field Abb. | Field # | Field Name | Wireless | Type | Wireline |
|---|---|---|---|---|---|
| (INIT) | | | | | |
| CITY (INIT) | 76 | City | R | A | R |
| STATE (INIT) | 77 | State/Province | R | A | R |
| ZIP CODE (INIT) | 78 | Zip Code | R | A | R |
| IMPCON | 79 | Implementation Contact | N | | O |
| TEL NO (IMPCON) | 80 | Telephone Number | N | | C |
| PAGER (IMPCON) | 81 | Pager Number | N | | O |
| ALT IMPCON | 82 | Alternate Implementation Contact | N | | O |
| TEL NO (ALT IMPCON) | 83 | Telephone Number | N | | C |
| PAGER (ALT IMPCON) | 84 | Pager Number | N | | O |
| DSGCON | 85 | Design/Engineering Contact | N | | O |
| DRC | 86 | Design Routing Code | N | | O |
| TEL NO (DSG) | 87 | Telephone Number | N | | C |
| FAX NO (DSG) | 88 | Facsimile Number | N | | O |
| EMAIL (DSG) | 89 | Electronic Mail Address | N | | O |
| STREET (DSG) | 90 | Street Address | N | | C |
| FLOOR (DSG) | 91 | Floor | N | | O |
| ROOM/MAIL STOP (DSG) | 92 | Room/Mail Stop | N | | O |
| CITY (DSG) | 93 | City | N | | C |
| STATE (DSG) | 94 | State/Province | N | | C |
| ZIP CODE (DSG) | 95 | Zip Code | N | | C |
| | | | | | |
| **Remarks Section (Field 96)** | | | | | |
| REMARKS | 96 | Remarks | O | A | O |
| | | | | | |
| | | | | | |
| **End User Information Form** | | | | | |
| | | | | | |
| **Administrative Section (Fields 1-6)** | | | | | |
| PON | 1 | Purchase Order Number | R | A | R |
| VER | 2 | Version Identification | O | A | O |
| AN | 3 | Account Number | C | A | C |
| ATN | 4 | Account Telephone Number | C | A | C |
| DQTY | 5 | Disconnect Quantity | N | | C |
| PG_of_ | 6 | Page _ of _ | R | A | R |
| | | | | | |
| **Location and Address Section (Fields 7-29)** | | | | | |
| NAME | 7 | End User Name | R | P | R |
| SAPR | 9 | Service Address House Prefix | N | | C |
| SANO | 10 | Service Address House Number | N | | C |
| SASF | 11 | Service Address House Number Suffix | N | | C |
| SASD | 12 | Service Address Street Directional | N | | O |

| Field Abb. | Field # | Field Name | Wireless | Type | Wireline |
|---|---|---|---|---|---|
| SASN | 13 | Service Address Street Name | R | P | R |
| SATH | 14 | Service Address Thoroughfare | N | | C |
| SASS | 15 | Service Address Street Suffix | N | | C |
| SADLO | 16 | Service Address Descriptive Location | N | | O |
| FLOOR (END USER) | 17 | Floor | O | P | O |
| ROOM (END USER) | 18 | Room | O | P | O |
| BLDG | 19 | Building | N | | O |
| CITY (END USER) | 20 | City | R | P | R |
| STATE (END USER) | 21 | State/Province | R | P | R |
| ZIP CODE (END USER) | 22 | Zip Code | R | P | R |
| LCON | 23 | Local Contact | N | | O |
| TEL NO (LCON) | 24 | Telephone Number | N | | O |
| EUMI | 25 | End User Moving Indicator | N | | O |
| ACC | 26 | Access Information | N | | O |
| WSOP | 27 | Working Service on Premises | N | | O |
| CPE MFR | 28 | Customer Premises Equipment Manufacturer | N | | O |
| CPR MOD | 29 | Customer Premises Equipment Model Number | N | | O |
| | | | | | |
| **Inside Wire Section (Fields 30 - 33)** | | | | | |
| IWO | 30 | Inside Wiring Options | N | | O |
| IWBAN | 31 | Inside Wire Bill Account Number | N | | O |
| IWCON | 32 | Inside Wire Contact | N | | C |
| TEL NO (IWCON) | 33 | Inside Wire Contact Telephone Number | N | | C |
| | | | | | |
| **Bill Section (Fields 35 -48)** | | | | | |
| EAN | 35 | Existing Account Number | N | | C |
| EATN | 36 | Existing Account Telephone Number | R | A | C |
| FBI | 37 | Final Bill Information Indicator | N | | O |
| BILLNM | 38 | Bill Name | N | | C |
| SBILLNM | 39 | Secondary Billing Name | N | | O |
| STREET (BILLNM) | 40 | Street Address | N | | C |
| FLOOR (BILLNM) | 41 | Floor | N | | O |
| ROOM (BILLNM) | 42 | Room | N | | O |
| CITY (BILLNM) | 43 | City | N | | C |
| STATE (BILLNM) | 44 | State/Province | N | | C |
| ZIP CODE (BILLNM) | 45 | Zip Code | N | | C |
| BILLCON | 46 | Billing Contact | N | | C |

| Field Abb. | Field # | Field Name | Wireless | Type | Wireline |
|---|---|---|---|---|---|
| TEL NO (BILLCON) | 47 | Telephone Number | N | | C |
| SSN | 48 | Social Security Number | N | | O |
| | | | | | |
| **Disconnection Information Section (Fields 49 - 54)** | | | | | |
| REF NUM | 49 | Reference Number | N | | C |
| DISC # | 50 | Disconnect Telephone Number | N | | C |
| TER | 51 | Terminal Number | N | | O |
| TC OPT | 52 | Transfer of Call Options | N | | O |
| TC TO | 53 | Transfer of Calls To | N | | C |
| TC PER | 54 | Transfer of Calls Period | N | | C |
| | | | | | |
| **Remarks Section (Field 55)** | | | | | |
| REMARKS | 55 | Remarks | O | A | O |
| | | | | | |
| | | | | | |
| **Number Portability Form** | | | | | |
| | | | | | |
| **Administrative Section (Fields 1-6)** | | | | | |
| PON | 1 | Purchase Order Number | R | A | R |
| VER | 2 | Version Identification | O | A | O |
| AN | 3 | Account Number | C | A | C |
| ATN | 4 | Account Telephone Number | C | A | C |
| NPQTY | 5 | Number Portability Quantity | R | A | R |
| PG_of_ | 6 | Page _ of _ | R | A | R |
| | | | | | |
| **Service Details Section (Fields 7-25)** | | | | | |
| REF NUM | 7 | Reference Number | R | A | R |
| CKR | 8 | Customer Circuit Reference | N | | O |
| LNA | 9 | Line Activity | R | A | R |
| LRN | 10 | Location Routing Number | O | P | O |
| TDT | 11 | Ten Digit Trigger | O | P | O |
| ECCKT | 12 | Exchange Company Circuit ID | N | | O |
| PORTED # | 13 | Ported Telephone Number | R | A | R |
| TNP | 14 | Total Number of Paths | N | | C |
| CFTN | 15 | Call Forward To Number | N | | C |
| NPT | 16 | Number Portability Type | R | P | C |
| RTI | 17 | Route Index | N | | O |
| NPTG | 18 | Number Portability Trunk Group | N | | O |
| BA | 19 | Blocking Activity | N | | C |
| BLOCK | 20 | Block | N | | O |
| FPI | 21 | Freeze PIC Indicator | N | | O |
| LPIC | 22 | IntraLATA Presubscription Indicator Code | N | | O |
| TC OPT | 23 | Transfer of Call Options | N | | O |
| TC TO | 24 | Transfer of Calls To | N | | C |
| TC PER | 25 | Transfer of Calls Period | N | | C |

| Field Abb. | Field # | Field Name | Wireless | Type | Wireline |
|---|---|---|---|---|---|
| | | | | | |
| **Remarks Section (Field 26)** | | | | | |
| REMARKS | 26 | Remarks | N | A | O |
| | | | | | |
| | | | | | |
| **Local Service Request Confirmation Form** | | | | | |
| | | | | | |
| **Administrative Section (Fields 1-27)** | | | | | |
| CCNA | 1 | Customer Carrier Name Abbreviation | R | A | R |
| PON | 2 | Purchase Order Number | R | A | R |
| VER | 3 | Version Identification | O | A | O |
| AN | 4 | Account Number | C | A | C |
| ATN | 5 | Account Telephone Number | C | A | C |
| LSR NO | 6 | Local Service Request Number | N | | O |
| ORD | 7 | Order Number | N | | O |
| INIT | 8 | Initiator Identification | R | A | R |
| PG_of_ | 9 | Page _ of _ | R | A | R |
| CD/TSENT | 10 | Confirmation Date and Time Sent | R | A | R |
| REP | 11 | Provider Contact Representative | R | A | R |
| ST | 12 | Switch Type | N | | C |
| IBT | 13 | ISDN BRI Type | N | | O |
| TEL NO | 14 | Telephone Number | R | A | R |
| CN TYP | 15 | Confirmation Type | R | A | R |
| CHC | 16 | Coordinated Hot Cut | O | P | O |
| FDT | 17 | Frame Due Time | R | P | C |
| DD | 18 | Due Date | R | P | R |
| EBD | 19 | Effective Bill Date | N | | O |
| BI1 | 20 | Billing Account Number Identifier 1 | O | A | C |
| BAN1 | 21 | Billing Account Number 1 | R | A | C |
| BI2 | 22 | Billing Account Number Identifier 2 | O | A | C |
| BAN2 | 23 | Billing Account Number 2 | O | A | C |
| EC VER | 24 | Exchange Carrier Version | C | A | C |
| DSGCON | 25 | Design/Engineering Contact | N | | O |
| NSP DSGCON | 26 | Network Service Provider (NSP) Design/Engineering Contact | N | | O |
| TEL NO (NSP DSGCON) | 27 | Telephone Number | N | | C |
| | | | | | |
| **Line/Network Information Section (Fields 28-53)** | | | | | |
| REF NUM | 28 | Reference Number | R | A | C |
| RNEX | 29 | Reference Number Extension | N | | C |
| ECCKT | 30 | Exchange Company Circuit ID | N | | C |
| TN | 31 | Telephone Number | N | | C |
| MATN | 32 | Main/Alternate Telephone Number | N | | O |
| CKR | 33 | Customer Circuit Reference | N | | O |

| Field Abb. | Field # | Field Name | Wireless | Type | Wireline |
|---|---|---|---|---|---|
| ISPID | 34 | ISDN Service Profile Identification | N | | C |
| CFA | 35 | Connecting Facility Assignment | N | | C |
| LORD | 36 | Loop Order Number | N | | C |
| NPORD | 37 | Number Portability Order Number | N | | C |
| PORTED # | 38 | Ported Telephone Number | R | P | R |
| RTI | 39 | Route Index | N | | C |
| DISC # | 40 | Disconnect Telephone Number | N | | C |
| TER | 41 | Terminal Number | N | | C |
| DISC ORD | 42 | Disconnect Order Number | N | | O |
| SYSTEM ID | 43 | System Identification | N | | C |
| CABLE ID | 44 | Cable Identification CC 61 Company Code | N | | C |
| SHELF | 45 | Shelf | N | | C |
| SLOT | 46 | Slot | N | | C |
| RELAY RACK | 47 | Relay Rack | N | | C |
| CHAN/PAIR | 48 | Channel/Pair | N | | R |
| UNIT | 49 | Unit | N | | O |
| PGI | 50 | Pair Gain Indicator | N | | C |
| DEMARC | 51 | Demarc Designation | N | | C |
| OOR | 52 | Out of Range Indicator | N | | C |
| NID | 53 | Network Interface Device | N | | C |
| | | | | | |
| **SELOC Section (Fields 54-58)** | | | | | |
| VC NUM | 54 | Virtual Connection Number | N | | C |
| DLCI | 55 | Data Link Connection Identifier | N | | C |
| RECCKT | 56 | Related Exchange Company Circuit Identification | N | | C |
| LST | 57 | Local Service Termination | N | | C |
| RDLCI | 58 | Related Data Link Connection Identifier | N | | C |
| | | | | | |
| **Directory Section (Fields 59-80)** | | | | | |
| ATN | 59 | Account Telephone Number | N | | R |
| DCNR | 60 | Directory Confirmation Type Returned | N | | R |
| CCNA | 61 | Company Code | N | | C |
| DOR | 62 | Date of Receipt | N | | R |
| DLORD | 63 | Directory Listing Order Number | N | | O |
| DAORD | 64 | Directory Assistance Order Number | N | | O |
| DSR NO | 65 | Directory Service Request Number | N | | C |
| DDA | 66 | Date of Availability in DA | N | | R |
| DINIT | 67 | Directory Request Initiator | N | | R |
| DCHC | 68 | Directory Assistance Coordinated Hot Cut | N | | O |
| DADT | 69 | Directory Assistance Due Time | N | | C |
| DBI1 | 70 | Directory Billing Account Number Identifier 1 | N | | C |

| Field Abb. | Field # | Field Name | Wireless | Type | Wireline |
|---|---|---|---|---|---|
| DBAN1 | 71 | Directory Billing Account Number 1 | N | | C |
| DBI2 | 72 | Directory Billing Account Number Identifier 2 | N | | C |
| DBAN2 | 73 | Directory Billing Account Number 2 | N | | C |
| DLCONT INIT | 74 | Name of Contact at Providing Company | N | | O |
| DLCONT TN | 75 | Directory Contact Telephone Number | N | | C |
| DACONT INIT | 76 | Name of Contact at Providing Company | N | | O |
| DACONT TN | 77 | Directory Contact Telephone Number | N | | C |
| LQTYR | 78 | Number of Listings Received | N | | R |
| SQTYR | 79 | Service Address Quantity Received | N | | R |
| DDQTYR | 80 | Number of Delivery Segments Received | N | | C |
| | | | | | |
| **Remarks Section (Field 81)** | | | | | |
| REMARKS | 81 | Remarks | O | A | O |

## *Appendix C: Acronyms*

| *Acronym* | *Expansion* |
|---|---|
| ACG | Automatic Code Gap |
| AIN | Advanced Intelligent Network |
| AMA | Automatic Message Accounting |
| AMPS | Advanced Mobile Phone System |
| CC | Customer Care |
| CCPN | Call Completion to a Ported Number |
| CDMA | Code Division Multiple Access |
| CdPA | Called Party Address |
| CdPN | Called Party Number |
| CDR | Call Detail Record |
| CFNA | Call Forward No Answer |
| CgPA | Calling Party Address |
| CgPN | Calling Party Number |
| CHN | Charge Number |
| CLASS | Custom Local Area Signaling Services |
| CMIP | Common Management Interface Protocol |
| CMRS | Commercial Mobile Radio Service |
| CNAM | Calling Name |
| CORD | Cellular Operations Record Distribution |
| CTIA | Cellular Telecommunications Industry Association |
| DN | Directory Number |
| EDI | Electronic Data Interchange |
| EO | End Office |
| ESN | Electronic Serial Number |
| ESP | Emergency Service Provider |
| FCC | Federal Communications Commission |
| FCI | Forward Call Indicator |
| FGD | Feature Group D |
| FOC | Firm Order Confirmation |
| GAP | Generic Address Parameter |
| GSM | Global System for Mobile Communications |
| GTT | Global Title Translation |
| HLR | Home Location Register |
| IAM | Initial Address Message |
| IMSI | International Mobile Station Identifier (E.212) |
| IN | Intelligent Network |
| IS-41 | Interim Standard - 41 |
| ISDN | Integrated Services Digital Network |
| ISUP | ISDN User Part |
| IXC | Inter Exchange Carrier |
| LATA | Local Access Transport Area |
| LEC | Local Exchange Carrier |

| *Acronym* | *Expansion* |
|---|---|
| LERG | Local Exchange Routing Guide |
| LIDB | Line Information Database |
| LRN | Location Routing Number |
| LSMS | Local Service Management System |
| LSP | Local Service Provider |
| MC | Message Center |
| MCC | Mobile Country Code |
| MDN | Mobile Directory Number |
| MIN | Mobile Identification Number |
| MNC | Mobile Network Code |
| MS | Mobile Station |
| MSA | Metropolitan Statistical Area |
| MSC | Mobile Switching Center |
| MSID | Mobile Station Identifier |
| MSIN | Mobile Station Identification Number (as part of IMSI) |
| MTP | Message Transfer Part |
| NANC | North American Numbering Council |
| NANP | North American Numbering Plan |
| NE | Network Element |
| NP | Number Portability |
| NP DB | Number Portability Database |
| NPAC-SMS | Number Portability Administrative Center Service Management System |
| NPRM | Notice of Proposed Rulemaking |
| O-MSC | Originating Mobile Switching Center |
| OAM&P | Operations, Administration, Maintenance, and Provisioning |
| OBF | Ordering and Billing Forum |
| OEO | Originating End Office |
| OSS | Operations Support System |
| OTAF | Over The Air Function |
| PC | Point Code |
| PODP | 3/6/10 Digit Public Office Dialing Plan |
| POI | Point of Interconnection |
| POP | Point of Presence |
| PSTN | Public Switched Telecommunications Network |
| RBOC | Regional Bell Operating Company |
| RN | Routing Number |
| SCCP | Signaling Connection Control Part |
| SCPs | Service Control Points |
| SK | Service Key |
| SME | Short Message Entity |
| SMR | Specialized Mobile Radio |
| SMS | Service Management System |
| SMS | Short Message Service |
| SOA | Service Order Activation |
| SP | Service Provider |
| SS7 | Signaling System 7 |

| *Acronym* | *Expansion* |
|---|---|
| SSN | Sub-System Number |
| STP | Signal Transfer Point |
| TCAP | Transaction Capabilities Application Part |
| TCPN | Translated Called Party Number |
| TDMA | Time Division Multiple Access |
| TEO | Terminating End Office |
| TLDN | Temporary Local Directory Number |
| TT | Translation Type |
| V-MSC | Visited Mobile Switching Center |
| VLR | Visiting Location Register |
| WIN | Wireless Intelligent Network |
| WNP | Wireless Number Portability |
| WSP | Wireless Service Provider |